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C-A OPERATIONS PROCEDURES MANUAL

4.75 Entry Procedure for the Proton Radiography Experiment Using the ID3D-R Hand Reader

Text Pages 2 through 7

Hand Processed Changes

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Collider-Accelerator Department Chairman Date

N. Williams

4.75 Entry Procedure for the Proton Radiography Experiment Using the ID3D-R Hand Reader

1. Purpose

- 1.1 This document will provide a procedure for entering the Proton Radiography experimental area utilizing the Recognition Systems ID3D-R Hand Reader.

2. Responsibilities

- 2.1 The (ACG) Access Controls Group shall be responsible for proper operation and modification of the Hand Reader and all peripheral hardware associated with experimental access.
- 2.2 A member of the Radiation Safety Committee (RSC), or an assigned designee, shall hold the key used to bypass the Hand Reader. The Radiation Safety Committee (RSC) Chair shall assign responsibility for the Hand Reader bypass key to the C-A QA Office.
- 2.3 Personnel who are permitted access to the Proton Radiography experiment are responsible for knowing their PIN number.

3. Prerequisites

- 3.1 Any personnel attempting to enter the Proton Radiography experiment shall be properly trained in how to use this Access Controls System.
- 3.2 Before any personnel can enter the Proton Radiography experimental area they must have their hand template and a PIN number entered into the Hand Reader by the enrollment administrator.

4. Precautions

None

5. Procedure

- 5.1 Verify that the Hand Reader LCD display (See Figure 2) has the word “*****READY*****” displayed. This ensures that the Hand Reader is ready to accept entry of a PIN number either using the key pad or magnetic card swipe.
- 5.2 PIN numbers are entered via the keypad located on the upper right of the Hand Reader. Pin numbers up to 10 digits in length may be used. Shorter PIN numbers may also be used if they are ended by pressing the # key.

- 5.3 Enter your PIN number and register it in the Hand Reader by immediately hitting the # key afterwards. If you make a mistake when entering your PIN number on the keypad, the entry can be cleared by pressing the * key.
- 5.4 Once a valid PIN number has been entered, **** PLACE HAND **** will appear on the display and the four finger position red LEDS located on the top of the unit will illuminate.

Note:

If you enter your ID number and ****PLACE HAND **** does not appear, this indicates that the ID number was not accepted. This may be due to an error in entry, or because someone before you had entered a digit into the keypad. This sort of problem can be prevented by clearing the keypad with the * key prior to entering your ID number.

- 5.5 When prompted to place your hand, put your **RIGHT** hand on the platen promptly as the reader will time out after several seconds and **** READY **** will again be displayed. If this happens you must repeat the entire procedure again.
- 5.6 Slide your right hand forward on the platen, bumping the web between the middle and index finger up against the tall web pin [See Figure 1].
- 5.7 Close all fingers together so that they touch their respective guide pins. The index and middle fingers should touch the large pin and the ring and little finger the smaller pins. The finger position red LEDS will then go out.
- 5.8 The balls of the finger tips should be against the platen surface, and the hand should be as flat as is comfortable. Cupping of the hand should be avoided.
- 5.9 If large rings are worn, care should be taken to see that the ring is rotated so that the stone is up in the normal position.
- 5.10 The hand is to remain held on the platen for a brief moment, until the **** PLACE HAND **** message no longer is shown. The results of the verification attempt will then be indicated on the LCD display.
- 5.11 If the result was successful, *** ID VERIFIED *** will be displayed and the system will take appropriate action such as allowing removal of the next key in sequence in the key tree.
- 5.12 If the result was unsuccessful **** TRY AGAIN **** will be displayed on the LCD display. You must start the procedure from the beginning.

- 5.13 If a PIN number is entered, but the hand is not correctly placed for measurement, the unit will time out in about 25 seconds. A PIN number must again be entered to initiate a new identity verification sequence.

Note:

If after three attempts identity is not verified, your PIN number will no longer be accepted, and you will be locked out. You should contact the enrollment administrator at this point.

- 5.14 Once the Hand Reader has accepted and verified your hand, it will allow you to remove a key from the 5-key key tree. You must remove a key within 20 seconds of being verified or you will have to be verified again.
- 5.15 The keys in the key tree are labeled B1 – B5. Removal of a key will only be allowed in sequential order (i.e. B1 first, B2 next and so on.). To remove a key you must turn it to the right and pull it towards you.
- 5.16 Once the key is removed you can now proceed to the gate and place it in the gate key switch. Turning this key switch in conjunction with a simultaneous release from the MCR will permit entry into the experimental area.
- 5.17 Remove the key from the key switch and take it with you. DO NOT leave the key in the key switch.

Note:

Resetting of the gates will not be allowed until all 5 keys have been returned to the key tree and are locked in place.

- 5.18 When your tasks are complete, return the keys to the key tree.
- 5.19 Proceed to the Hand Scanner and have your hand scanned. This signifies that you have signed out.
- 5.20 In the event that the ACG has determined that the Hand Reader has malfunctioned (this does not imply that a single person has been locked out after three attempts at entry) the procedure to bypass the Hand Reader shall be followed. ([See C-A-OPM 4.74](#)).

6. Documentation

None

7. **References**

7.1 ID3D-R Recognitions Systems Operating and Installation Manual.

7.2 [C-A-OPM OPM 4.74 “Use of Alternative to ID3D-R Hand Reader”](#)

8. **Attachments**

8.1 Figure 1 – Correct Placement of Hand in Hand Reader.

8.2 Figure 2 – Hand Reader System Components.

Correct placement of hand in Hand Reader

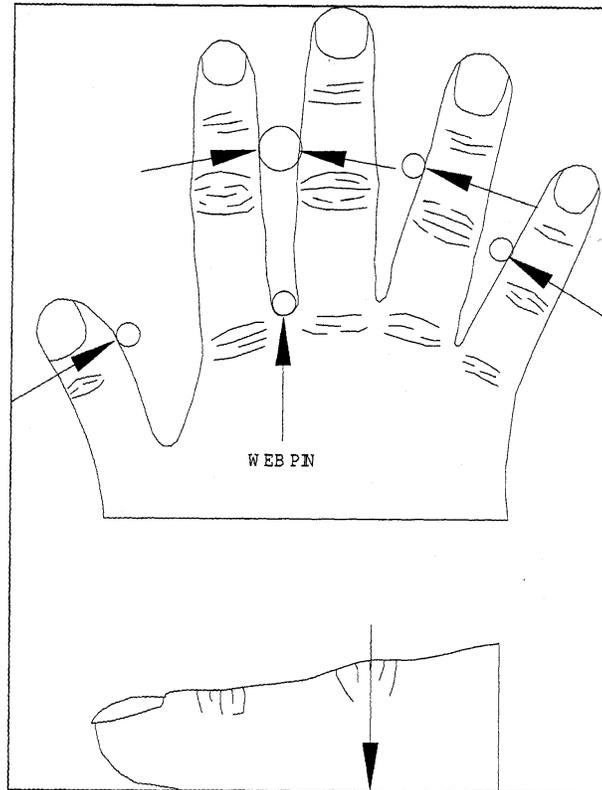
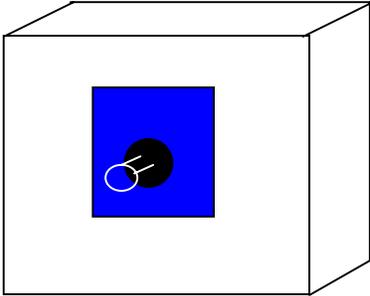


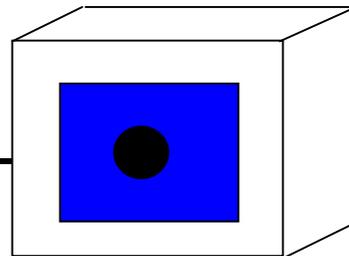
Figure 1
Hand must be flat against platen.

GATE KEY SWITCH USING KEYTREE KEYS

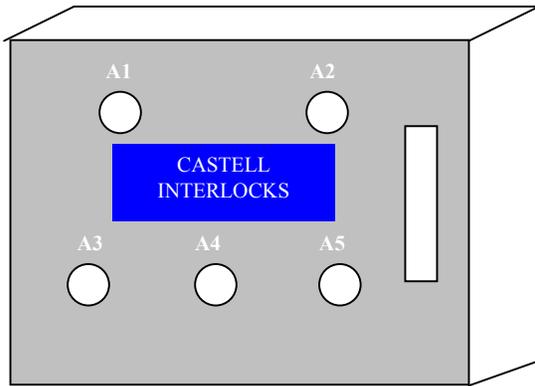


PROTON RADIOGRAPHY GATE ENTRY IN CONJUNCTION WITH SIMULTANEOUS

HAND READER BYPASS SWITCH



5 IDENTICAL KEYS



KEYTREE KEYS ARE REMOVED SEQUENTIALLY

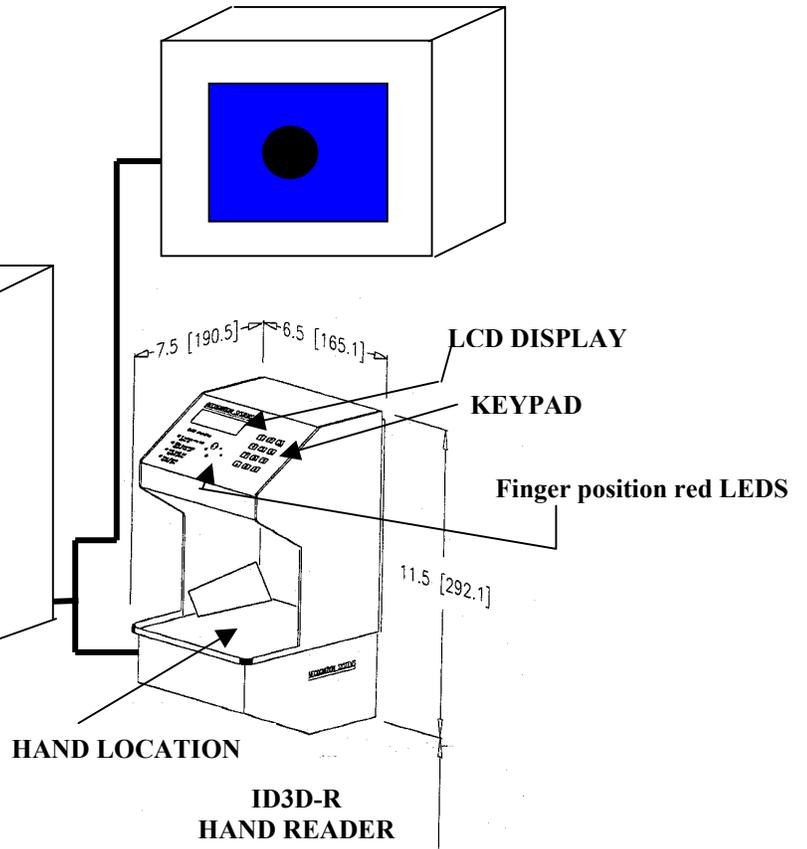


Figure 2